

ABSTRACT OF THE DISCLOSURE

An expandable reamer apparatus and methods for reaming a borehole, wherein a laterally movable blade carried by a tubular body may be selectively positioned at an inward position and an expanded position. The movable blade, held inwardly by blade-biasing elements, may be forced outwardly by drilling fluid selectively allowed to communicate therewith by way of an actuation sleeve disposed within the tubular body. Alternatively, a separation element may transmit force or pressure from the drilling fluid to the movable blade. Further, a chamber in communication with the movable blade may be pressurized by way of a downhole turbine or pump. A ridged seal wiper, compensator, movable bearing pad, fixed bearing pad preceding the movable blade, or an adjustable spacer element to alter expanded blade position may be included within the expandable reamer. In addition, a drilling fluid pressure response indicating an operational characteristic of the expandable reamer may be generated.

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